

REMARKS

Claims 1, 3, 4, and 6, are all the claims pending in the application. Claims 2 and 5 have been canceled without prejudice or disclaimer. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected claims 4-6 under § 112, 1st paragraph, as failing to comply with the enablement requirement. The Examiner asserts that the claims contain subject matter not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Specifically, the Examiner argues that the specification does not disclose how metallocene-polyethylene itself is used as a catalyst to form another material.

In response, Applicants have amended the claims to clarify that the resin material from which the storage case is made comprises a metallocene-catalyst-formed resin, and that resin may be used in combination with another resin. These claim amendments are supported by the specification as at: page 5, lines 4-7 (case 10 is molded of ... polypropylene, and 5 to 25% of metallocene-polyethylene added thereto); paragraph bridging pages 5 and 6 (case 30 is also molded of the material consisting of ... polypropylene ... and from 5 mass % to 25 mass % of metallocene-polyethylene added thereto); and page 6, lines 6-10 (storage cases ... molded of polyethylene added with from 10 mass % to 15 mass % of metallocene catalyst).

The Examiner rejected claims 4-6 under § 112, 2nd paragraph, as indefinite. Specifically, the Examiner asserted that it is unclear whether Applicants are claiming a finished material or a specific catalyst used in forming a finished material. The amendments made above in connection with the rejection under § 112, 1st paragraph, make clear that the claims are directed to a case made of a polyethylene formed through the use of a metallocene catalyst.

Claim Rejections – 35 U.S.C. § 103

The Examiner rejected claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 5,518,116 to Morita (hereinafter Morita) in view of US Patent 5,720,916 to Williams

et al. (hereinafter Williams), US Patent 4,892,851 to Ewen et al. (hereinafter Ewen), and European Patent 0 428 972 A2 to Asanuma et al. (hereinafter Asanuma). Applicants respectfully traverse this rejection because the references fail to teach or suggest all the elements as set forth in the claims.

Claim 1 sets forth that the metallocene-catalyst formed resin is added to the resin material in an amount of from 5 mass % to 25 mass %.

In contrast to that set forth in claim 1, Williams teaches a polypropylene composition that includes at least 85% of metallocene-polypropylene. That is, Williams sets forth that a new crystalline SPP has been prepared using a metallocene catalyst, as set forth in Ewen.¹ Williams goes on to state that his polypropylene composition includes a blend of at least 85% SPP and up to 15% IPP.² And Williams teaches that the SPP used is that as set forth in Ewen, i.e., is metallocene-polypropylene.³ Further, as shown in Table IV, Williams teaches that the lowest amount of SPP used in a blend was 40%. Yet 40% is much higher than Applicants' claimed range of from 5% to 25% of a metallocene-catalyst-formed resin.

Ewen and Asanuma teach various metallocene-catalyst-formed resins, but neither one teaches or suggests any particular amount of such a resin combined with another resin to form a polymer blend.

Accordingly, even if one of ordinary skill in the art were motivated to combine Williams, Ewen, Asanuma, and Morita as suggested by the Examiner, any such combination would still not teach or suggest all the elements as set forth in Applicants' claim 1.

The Examiner asserts that it "would have been obvious to one of ordinary skill in the art ... to form the resin of Morita-Ewen-Asanuma using the mass percentages claimed by the applicant, since it has been held that where the general conditions of a claim are disclosed in the

¹ Williams at col. 1, lines 56-60.

² Williams at col. 1, lines 64-66.

³ Williams at col. 2, lines 60-64.

prior art, discovering the optimum or workable ranges involves only routine skill in the art.⁴ But Williams teaches away from such a modification. That is, Williams teaches that the lowest amount of metallocene-polymer used in a blend is 40%. Further, Williams teaches that when the amount of metallocene-polymer used drops below 85%, the cycle time and haze are very disadvantageously affected.⁵ Accordingly, one of ordinary skill in the art—looking at the teachings of the references as a whole—would not have used metallocene-polymer in a blend in an amount of from 5% to 25%, as set forth in Applicants' claim 1.

Moreover, according to MPEP § 2144.05 (II), generally differences in concentration or temperature will support the patentability of subject matter encompassed by prior art when there is evidence indicating such concentration or temperature is critical. Applicants submit herewith Exhibit A, showing the results of an aptitude assessment for reading a barcode. Specifically, the exhibit shows the number of faulty readings (as a percentage of total tested samples for a given dopant ratio) versus dopant ratio of metallocene-catalyst (in wt %). As is shown from Applicants' data, there is not a constant linear relationship between the number of faulty readings and the dopant ratio. Instead, there are at least two distinct regions. In a first region, from 15% to 25% dopant, there is a line of a first slope. In a second region, above 25% dopant, there is a line of a second slope, wherein the second slope is greater than the first. Thus, as the ratio of metallocene-catalyst increases beyond 25% there is an increase in the rate of faulty readings above the rate when the ratio of metallocene-catalyst increases from 15% to 25%. Accordingly, 25% of metallocene-catalyst represents a critical value as found by Applicants.

- The Examiner rejected claims 4-6 under §103(a) as being unpatentable over Morita in view of Ewen and Asanuma as applied to claim 1, and further in view of US Patent 6,114,046 to Hanoka (hereinafter Hanoka). Applicants respectfully traverse this rejection because the references fail to teach or suggest all the elements as set forth in the claims.

⁴ Office Action at page 5, 1st full paragraph.

⁵ Williams at col. 4, line 52 - col. 5, line 21.

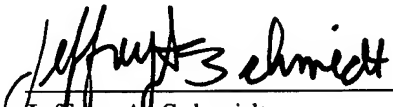
As noted above, the Examiner's attempted combination of Morita, Ewen, and Asanuma is deficient. And Hanoka, in a manner similar to in Williams, teaches away from the percentages of metallocene-polyethylene claimed. Specifically, Hanoka teaches a polymer blend wherein 14% comonomer of octene is added to the metallocene-polyethylene, i.e., the metallocene-polyethylene makes up 86% of the polymer blend.⁶

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Jeffrey A. Schmidt
Registration No. 41,574

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: October 30, 2003

⁶ Hanoka at col. 5, lines 23-25, and 51-53.